

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

#### ANALYTICAL RESULTS

Prepared for:

SUN: Aquaterra Tech. PO Box 744 West Chester PA 19381

610-431-5733

Prepared by:

Lancaster Laboratories 2425 New Holland Pike Lancaster, PA 17605-2425

April 16, 2009

### SAMPLE GROUP

The sample group for this submittal is 1139887. Samples arrived at the laboratory on Thursday, April 09, 2009. The PO# for this group is PHILADELPHIA.

| Client Description | <u>Lancaster Labs Number</u> |
|--------------------|------------------------------|
| BH-28-09 Grab Soil | 5643346                      |
| BH-29-09 Grab Soil | 5643347                      |
| BH-30-09 Grab Soil | 5643348                      |
| BH-27-09 Grab Soil | 5643349                      |

| ELECTRONIC<br>COPY TO | SUN: Aquaterra Tech. | Attn: Kevin Martin    |
|-----------------------|----------------------|-----------------------|
| ELECTRONIC            | Langan               | Attn: Joseph Catricks |
| COPY TO<br>ELECTRONIC | SUN: Aquaterra Tech. | Attn: Megan Breen     |
| COPY TO<br>ELECTRONIC | SUN: Aquaterra Tech. | Attn: Tiffani Doerr   |
| COPY TO               | -                    |                       |



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Questions? Contact your Client Services Representative Jessica A Oknefski at (717) 656-2300

Respectfully Submitted,

Robert Strocko Jr.
Manager



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Lancaster Laboratories Sample No. SW 5643346

Group No. 1139887

PA

BH-28-09 Grab Soil

Philadelphia Refinery AOI-6

COC: 202848 BH-28-09

Collected: 04/08/2009 11:30 by TD Account Number: 10132

Submitted: 04/09/2009 14:40

Reported: 04/16/2009 at 18:49

Discard: 06/16/2009

SUN: Aquaterra Tech.

PO Box 744

West Chester PA 19381

| CAT<br>No. | Analysis Name  |            | CAS Number | Dry<br>Result | Dry<br>Limit of<br>Quantitation* | Dry<br>Method<br>Detection Limit | Dilution<br>Factor |
|------------|--|------------|------------|---------------|----------------------------------|----------------------------------|--------------------|
| SW-846     | 6 6020   | Metals     |            | mg/kg         | mg/kg                            | mg/kg                            |                    |
| 06135      | Lead   |            | 7439-92-1  | 993           | 2.60                             | 0.390                            | 20                 |
| SM20 2     | 2540 G   | Wet Chemis | try        | %             | 8                                | %                                |                    |
| 00111      | Moisture   |            | n.a.       | 23.0          | 0.50                             | 0.50                             | 1                  |
|            | "Moisture" represer<br>103 - 105 degrees (<br>as-received basis. |            |            |               |                                  |                                  |                    |

#### General Sample Comments

PA DEP Lab Certification ID 36-00037, Expiration Date: 1/31/10

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

| CAT<br>No. | Analysis Name              | Method       | Trial# | Batch#        | Analysis<br>Date and Ti | me    | Analyst                 | Dilution<br>Factor |
|------------|----------------------------|--------------|--------|---------------|-------------------------|-------|-------------------------|--------------------|
| 06135      | Lead                       | SW-846 6020  | 1      | 091046150001A | 04/16/2009              | 01:02 | Choon Y Tian            | 20                 |
| 06150      | ICP/MS SW-846 Solid digest | SW-846 3050B | 1      | 091046150001  | 04/14/2009              | 20:40 | Annamaria<br>Stipkovits | 1                  |
| 00111      | Moisture                   | SM20 2540 G  | 1      | 09104820004B  | 04/14/2009              | 16:16 | Scott W Freisher        | 1                  |



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Lancaster Laboratories Sample No. SW 5643347

Group No. 1139887

BH-29-09 Grab Soil

Philadelphia Refinery AOI-6

COC: 202848 BH-29-09

Collected: 04/08/2009 11:35 by TD Account Number: 10132

Submitted: 04/09/2009 14:40

Reported: 04/16/2009 at 18:49 PO Box 744

Discard: 06/16/2009

West Chester PA 19381

SUN: Aquaterra Tech.

| CAT<br>No. | Analysis Name   |            | CAS Number | Dry<br>Result | Dry<br>Limit of<br>Quantitation* | Dry<br>Method<br>Detection Limit | Dilution<br>Factor |  |
|------------|---|------------|------------|---------------|----------------------------------|----------------------------------|--------------------|--|
| SW-846     | 6020  | Metals     |            | mg/kg         | mg/kg                            | mg/kg                            |                    |  |
| 06135      | Lead  |            | 7439-92-1  | 409           | 1.07                             | 0.160                            | 10                 |  |
| SM20 2     | 2540 G  | Wet Chemis | try        | %             | %                                | %                                |                    |  |
| 00111      | Moisture  |            | n.a.       | 10.1          | 0.50                             | 0.50                             | 1                  |  |
|            | "Moisture" represents the loss in weight of the sample after oven drying at<br>103 - 105 degrees Celsius. The moisture result reported above is on an |            |            |               |                                  |                                  |                    |  |

as-received basis.

#### General Sample Comments

PA DEP Lab Certification ID 36-00037, Expiration Date: 1/31/10

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

| CAT<br>No. | Analysis Name              | Method       | Trial# | Batch#        | Analysis<br>Date and Ti | me    | Analyst                 | Dilution<br>Factor |
|------------|----------------------------|--------------|--------|---------------|-------------------------|-------|-------------------------|--------------------|
| 06135      | Lead                       | SW-846 6020  | 1      | 091046150001A | 04/15/2009              | 06:21 | David K Beck            | 10                 |
| 06150      | ICP/MS SW-846 Solid digest | SW-846 3050B | 1      | 091046150001  | 04/14/2009              | 20:40 | Annamaria<br>Stipkovits | 1                  |
| 00111      | Moisture                   | SM20 2540 G  | 1      | 09104820004B  | 04/14/2009              | 16:16 | Scott W Freisher        | 1                  |



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Lancaster Laboratories Sample No. SW 5643348

Group No. 1139887

BH-30-09 Grab Soil

Philadelphia Refinery AOI-6

COC: 202848 BH-30-09

Collected: 04/08/2009 12:00 by TD Account Number: 10132

Submitted: 04/09/2009 14:40

Reported: 04/16/2009 at 18:49 PO Box 744

Discard: 06/16/2009

SUN: Aquaterra Tech. West Chester PA 19381

| CAT<br>No. | Analysis Name       |            | CAS Number | Dry<br>Result | Dry<br>Limit of<br>Quantitation* | Dry<br>Method<br>Detection Limit | Dilution<br>Factor |
|------------|---------------------|------------|------------|---------------|----------------------------------|----------------------------------|--------------------|
| SW-846     | 6020                | Metals     |            | mg/kg         | mg/kg                            | mg/kg                            |                    |
| 06135      | Lead                |            | 7439-92-1  | 2,310         | 11.3                             | 1.70                             | 100                |
| SM20 2     | 540 G               | Wet Chemis | try        | 8             | %                                | 8                                |                    |
| 00111      | Moisture            |            | n.a.       | 15.1          | 0.50                             | 0.50                             | 1                  |
|            | "Moisture" represes |            | _          | -             | 1 0                              |                                  |                    |

as-received basis.

#### General Sample Comments

PA DEP Lab Certification ID 36-00037, Expiration Date: 1/31/10

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

| CAT<br>No. | Analysis Name              | Method       | Trial# | Batch#        | Analysis<br>Date and Ti | me    | Analyst                 | Dilution<br>Factor |
|------------|----------------------------|--------------|--------|---------------|-------------------------|-------|-------------------------|--------------------|
| 06135      | Lead                       | SW-846 6020  | 1      | 091046150001A | 04/16/2009              | 01:15 | Choon Y Tian            | 100                |
| 06150      | ICP/MS SW-846 Solid digest | SW-846 3050B | 1      | 091046150001  | 04/14/2009              | 20:40 | Annamaria<br>Stipkovits | 1                  |
| 00111      | Moisture                   | SM20 2540 G  | 1      | 09104820004B  | 04/14/2009              | 16:16 | Scott W Freisher        | 1                  |



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Lancaster Laboratories Sample No. SW 5643349

Group No. 1139887

BH-27-09 Grab Soil

Philadelphia Refinery AOI-6

COC: 202848 BH-27-09

Collected: 04/08/2009 12:20 by TD Account Number: 10132

Submitted: 04/09/2009 14:40 SUN: Aquaterra Tech.

Reported: 04/16/2009 at 18:49 PO Box 744

Discard: 06/16/2009

West Chester PA 19381

| CAT<br>No. | Analysis Name                |                 | CAS Number             | Dry<br>Result          | Dry<br>Limit of<br>Quantitation* | Dry<br>Method<br>Detection Limit | Dilution<br>Factor |
|------------|------------------------------|-----------------|------------------------|------------------------|----------------------------------|----------------------------------|--------------------|
| SW-84      | 6 6020                       | Metals          |                        | mg/kg                  | mg/kg                            | mg/kg                            |                    |
| 06135      | Lead                         |                 | 7439-92-1              | 463                    | 1.16                             | 0.174                            | 10                 |
| SM20       | 2540 G                       | Wet Chemis      | try                    | %                      | 8                                | %                                |                    |
| 00111      | Moisture                     |                 | n.a.                   | 14.6                   | 0.50                             | 0.50                             | 1                  |
|            | "Moisture" represe           | nts the loss in | n weight of th         | e sample afte          | er oven drying at                |                                  |                    |
|            | 103 - 105 degrees (          | Celsius. The mo | oisture result         | reported abo           | ove is on an                     |                                  |                    |
|            | Moisture "Moisture" represen | nts the loss in | n.a.<br>n weight of th | 14.6<br>ne sample afte | 0.50<br>er oven drying at        | -                                | 1                  |

as-received basis.

#### General Sample Comments

PA DEP Lab Certification ID 36-00037, Expiration Date: 1/31/10

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

| CAT<br>No. | Analysis Name              | Method       | Trial# | Batch#        | Analysis<br>Date and Ti | me    | Analyst                 | Dilution<br>Factor |
|------------|----------------------------|--------------|--------|---------------|-------------------------|-------|-------------------------|--------------------|
| 06135      | Lead                       | SW-846 6020  | 1      | 091046150001A | 04/15/2009              | 06:30 | David K Beck            | 10                 |
| 06150      | ICP/MS SW-846 Solid digest | SW-846 3050B | 1      | 091046150001  | 04/14/2009              | 20:40 | Annamaria<br>Stipkovits | 1                  |
| 00111      | Moisture                   | SM20 2540 G  | 1      | 09104820004B  | 04/14/2009              | 16:16 | Scott W Freisher        | 1                  |



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### Quality Control Summary

Client Name: SUN: Aquaterra Tech. Group Number: 1139887

Reported: 04/16/09 at 06:49 PM

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

### Laboratory Compliance Quality Control

| Analysis Name                          | Blank<br><u>Result</u> | Blank<br><u>LOQ**</u> | Blank<br><u>MDL</u> | Report<br><u>Units</u> | LCS<br>%REC | LCSD<br>%REC | LCS/LCSD<br><u>Limits</u> | RPD | RPD Max |
|--|------------------------|-----------------------|---------------------|------------------------|-------------|--------------|---------------------------|-----|---------|
| Batch number: 091046150001A<br>Lead    | Sample nu<br>< 1.00    | mber(s): 5<br>1.00    | 643346-564<br>0.150 | 13349<br>mg/kg         | 107         |              | 78-122                    |     |         |
| Batch number: 09104820004B<br>Moisture | Sample nu              | mber(s): 5            | 643346-564          | 13349                  | 100         |              | 99-101                    |     |         |

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike Background (BKG) = the sample used in conjunction with the duplicate

| Analysis Name                          | MS<br><u>%REC</u> | MSD<br><u>%REC</u>       | MS/MSD<br><u>Limits</u> | RPD           | RPD<br><u>MAX</u> | BKG<br>Conc       | DUP<br><u>Conc</u>  | DUP<br><u>RPD</u> | Dup RPD<br><u>Max</u> |
|--|-------------------|--------------------------|-------------------------|---------------|-------------------|-------------------|---------------------|-------------------|-----------------------|
| Batch number: 091046150001A<br>Lead    | Sample<br>813 (2) | number(s)<br>2041<br>(2) |                         | -564334<br>19 | 19 UNSPI<br>20    | X: 5643346<br>765 | BKG: 5643346<br>743 | 5<br>3            | 20                    |
| Batch number: 09104820004B<br>Moisture | Sample            | number(s)                | : 5643346               | -564334       | 19 BKG:           | : P643658<br>23.5 | 22.3                | 5                 | 15                    |

<sup>\*-</sup> Outside of specification

<sup>\*\*-</sup>This limit was used in the evaluation of the final result for the blank

<sup>(1)</sup> The result for one or both determinations was less than five times the LOQ.

<sup>(2)</sup> The unspiked result was more than four times the spike added.

## Analysis Request/ Environmental Services Chain of Custody



For Lancaster Laboratories use only

Acct. # 10132 Group# 1139887 Sample # 569

**COC #** 202848

| • Luboratories                                    | Ple                  | ase print. Ins    | truction | ns on re         | everse                                 | side co    | Tespon         | d with ci    | rcled numb | ers.    |              | For Lab Has Only                         |               |                |
|---|----------------------|-------------------|----------|------------------|--|------------|----------------|--------------|------------|---------|--------------|--|---------------|----------------|
| 1) 1 1 -  | 1                    |                   |          | ,                |  |            |                |              | Analyse    | *****   |              | For Lab Use Only<br>FSC:                 |               | _              |
| Client: Hquaterra Tec                             | Acct. #: _           |                   |          |                  | Matrix                                 | (4)        |                |              | Preservat  | ion Cod | es           | SCR#:                                    |               | -              |
| Project Name/#: Ph.71 y Rd - AC                   |                      |                   |          |                  | ± åg                                   | lΥ         |                |              |            |         |              | Preservation Codes                       |               |                |
| Project Manager: 7. Doch                          |                      |                   |          |                  |  | je         | l ~            |              |            |         |              | H=HCl T=Thiosu<br>N=HNO₃ B=NaOH          |               | (6)            |
|   |                      |                   |          |                  | 142                                    |            | 3              |              |            |         |              | S=H <sub>2</sub> SO <sub>4</sub> O=Other |               | # <del>3</del> |
| Sampler: T. Doerr                                 |                      |                   |          |                  | 慢島                                     | 1          | 2              |              |            |         |              |  |               |                |
| Name of state where samples were collected        | <u> PA</u>           |                   | (1)      | 2                | βā                                     | 10         | 1              |              |            |         |              |  |               | S es           |
| 2)  |                      |                   | M        | 8                |  | . 4        | 1 4            |              |            |         |              |  |               | a to           |
| Sample Identification                             | Date<br>Collected    | Time<br>Collected | Grab     | 8   <del>8</del> | I B                                    | 1 8<br>1 8 | 10             |              | 1 1        |         |              | Bomarko                                  |               | 6 S            |
|   | consistent :         |                   | 0        | 2 10             | 257                                    |            | '              | -            |            | -       |              | Remarks                                  |               | ₽ <u>9</u>     |
| BH-21-09 BH-28-09                                 | 4/8/09               | 1130              | <b>X</b> | <u> </u>         |  | 1          | X              |              |            |         |              | temp/1.0-                                | 2.300         | 2              |
| 3H-22-09 BH-29-09                                 | 4/8/09               | 1135              | x        | X                |  |            | X              |              | <u> </u>   |         |              | ,  |               |                |
| BH-23-09-BH-30-09                                 | 4/8/09               | 1200              | х        | X                |  |            | Х              |              |            |         |              | Hipdated sa                              | mole.         | ID c           |
| BH-20-09-BH-27-09                                 | 4/8/09               | 1220              | X        | X                | <del> </del>                           | 1          | X              |              |            |         |              | Der T.D. 8                               |               |                |
| * 9900 4/14/09                                    | <del> 7/*/*/  </del> | 1220              |          | <u>†</u> "       |  |            | <del>  ^</del> |              |            |         |              |  |               |                |
|   |                      |                   |          | +                | <del> </del> -                         | -          | 1              |              |            |         |              | - GHO                                    | 4/14/00       | <b>.</b>       |
|   |                      |                   |          | +                | <u> </u>                               |            | <b>-</b>       |              |            |         |              |  |               |                |
|   |                      |                   |          |                  |  |            |                |              |            |         |              |  |               |                |
| · · · · · · · · · · · · · · · · · · ·             |                      |                   |          |                  |  |            |                |              |            |         |              |  |               |                |
|   |                      |                   |          |                  |  |            |                |              |            |         |              |  |               |                |
|   |                      |                   |          |                  |  |            |                |              |            |         |              |  |               |                |
| Turnaround Time Requested (TAT) (please           |                      |                   | R        | elingu           | <b>M</b> ed/                           | by:        | 7              | <u> </u>     | Date       | , Time  | Received by: | <i>f</i> — 21.                           | Date,         | Time (         |
| (Rush TAT is subject to Lancaster Laboratories ap | proval and surcharg  | je.)              | Ŀ        | 7                | XX                                     | _          | $\pm >$        | <del>-</del> | - 48h      | 9 152   | Hauas        | na Frida                                 | 1/8/89        | 153            |
| Date results are needed:                          | Dhana Fay            | Email             | R        | elingu           | ithed                                  | by:        |                |              | Date       | Time    | Regeived by: | , ,                                      | , , ,         | Time           |
| Rush results requested by (please circle):        |                      |                   |          |                  | gn                                     | -          |                | _            |            | 1 10:01 |              | Can Di                                   | 4/9/09        |                |
|   |                      |                   |          |                  | ished l                                |            |                |              | Date       |         | Received by: | - Jacon                                  | 77.0          | Time           |
| Data Package Options (please circle if require    |                      | Complete?         |          | ( \)             |  |            | .0 10.         | ,            | 4/9        | 1       | H/ \         | V  |               |                |
|   |                      |                   |          |                  | Relinquished by: Date Time Received by |            |                |              |            |         | Date         | Time                                     |               |                |
|   | T RCP                |                   |          | U                |  | - J. W     | 1/2            |              |            |         | ,            |  |               |                |
| l —   | (MS/MSD/Dup)? \      | es No             | R.       | elipau           | ished                                  | hv.        | +              |              | Date       | Time    | Received by: | me Il                                    | <b>√</b> Date | Time           |
|   | equired? Yes         |                   | ' "      | omrqu            | 131160                                 | υy.        | \              | \            | Dale       | Time    | Western Dy.  | 7h> 410                                  | 1700          | 144            |
|   |                      | 2/25/1            |          |                  |  |            |                |              |            |         | 7) 050 050   | / V   U                                  | 1104          | 1 00           |

### Analysis Request/ Environmental Services Chain of Custody



For Lancaster Laboratories use only \_\_\_\_\_\_\_Sample # \_\_\_\_\_\_\_\_Sample # \_\_\_\_\_\_\_\_\_

Sample # 74433410 = 49

#COC #

202848

| 1) / / _   |   | Please print. In  |   |                  |                |       |  |          | 200203                 | in and the second | Same and | Requ         | estec          |          | For Lab Use Only   | ,              |                      |
|--|---|-------------------|---|------------------|----------------|-------|--|----------|------------------------|-------------------|----------|--------------|----------------|----------|--|----------------|----------------------|
| Client: HGuatera leCh. Acct.#:   |   |                   |   |                  |                |       | 4  |          |                        | Pre               | servati  | on Cod       | les            |          | SCR#:  |                |                      |
| Project Name/#: Ph.71 y R/- A  | <u>01-6</u> PWSID<br>P.O.#.                               | #:                |   | -<br>-           | ile Checkif    |       |  | pa       |                        |                   |          |              |                |          | Preservation Coo<br>H=HCi T=Thi<br>N=HNO <sub>3</sub> B=Na<br>S=H <sub>2</sub> SO <sub>4</sub> O=Oti | osulfate<br>OH | 6                    |
| Sampler:   | 121   | Time<br>Sollected | 3 | å                | Water Decision | Other | Total# of Container                          | Total 10 |                        |                   |          |              |                |          | Remarks  |                | Amperature of semple |
| BH-21-09 BH-28-09  | 4/8/09  | //30              | γ |                  | (              |       | í  | Х        |                        |                   |          |              |                |          |  |                | 0 a.c.               |
| BH-22-08-10 BH-29-09   |   | 1135              | X |                  | (              |       | at Militin                                   | Х        | •                      |                   |          | · ·          | <del> </del> - | *        |  |                |                      |
| BH-23-88 BH-30-0   | 7 4/8/09  | 1200              | У |                  | K              |       | 3  | χ        |                        |                   |          |              |                |          |  |                |                      |
| 195H-20-09 BH-27-09  | 4/8/09  | 1220              | χ | 1                | X              |       | 1  | X        |                        |                   |          |              |                |          |  |                |                      |
|  |   |                   |   | -                | -              |       |  |          |                        |                   |          | <del> </del> |                | _   .    | :  |                |                      |
|  | -   |                   |   |                  |                |       |  |          |                        |                   |          |              |                |          |  |                |                      |
|  |   |                   |   | +                | +              |       |  |          |                        |                   |          | -            |                | -        |  |                | ·                    |
|  |   |                   |   |                  |                |       |  |          |                        |                   |          |              |                |          |  |                |                      |
| Turnaround Time Requested (TAT) (pleas<br>(Rush TAT is subject to Lancaster Laboratories a<br>Date results are needed: |   |                   | L | _                | y She          |       |  |          | <u></u>                |                   | y. /     | 152          | ) <i>[</i> -   |          | Ina Fridge   | 4/8/67         | Time (               |
| Rush results requested by (please circle): Phone Fax (E-mail)  |   |                   |   | Relinguished by: |                |       |  |          | Date Time 7/1/01 /0:03 | Received by:      | Exply 4  | 11           | Time           |          |  |                |                      |
|  |   |                   |   | Relinquished by: |                |       |  |          |                        | Date              | Time     | Rec          | eived by       | r.OV     | Date   | Time           |                      |
| Data Package Options (please circle if require Type I (validation/NJ Reg)  TX TRRP-13  Type II (Tier iI)  MA MCP  C    | TRCP  |                   | - | Reling           | uished         | -     | <u>.                                    </u> |          |                        |                   | Date     | Time         | Rec            | eived by | r.   | Date           | Time                 |
| Type IV (CLP SOW) (If yes, indicate QC sample an   | (MS/MSD/Dup)?<br>submit hiphore volume.)<br>dequired? Yes | -<br>             | F | Relinq           | uished         |       |  |          |                        |                   | Date     | Time         | Rec            | eived by | <i>r</i> :   | Date           | Time                 |

# Lancaster Laboratories Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

| N.D.     | none detected         | BMQL         | Below Minimum Quantitation Level               |
|----------|-----------------------|--------------|--|
| TNTC     | Too Numerous To Count | MPN          | Most Probable Number                           |
| IU       | International Units   | CP Units     | cobalt-chloroplatinate units                   |
| umhos/cm | micromhos/cm          | NTU          | nephelometric turbidity units                  |
| С        | degrees Celsius       | F            | degrees Fahrenheit                             |
| Cal      | (diet) calories       | lb.          | pound(s)                                       |
| meq      | milliequivalents      | kg           | kilogram(s)                                    |
| g        | gram(s)               | mg           | milligram(s)                                   |
| ug       | microgram(s)          | I            | liter(s)                                       |
| ml       | milliliter(s)         | ul           | microliter(s)                                  |
| m3       | cubic meter(s)        | fib >5 um/ml | fibers greater than 5 microns in length per ml |

- < less than The number following the sign is the <u>limit of quantitation</u>, the smallest amount of analyte which can be reliably determined using this specific test.
- > greater than
- ppm parts per million One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

**Inorganic Qualifiers** 

- ppb parts per billion
- **Dry weight**Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture.

U.S. EPA data qualifiers:

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| A<br>B<br>C<br>D<br>E | TIC is a possible aldol-condensation product<br>Analyte was also detected in the blank<br>Pesticide result confirmed by GC/MS<br>Compound quatitated on a diluted sample<br>Concentration exceeds the calibration range of<br>the instrument | B<br>E<br>M<br>N<br>S | Value is <crdl, (msa)="" additions="" amount="" but="" calculation<="" control="" due="" duplicate="" estimated="" for="" injection="" interference="" limits="" met="" method="" not="" of="" precision="" spike="" standard="" th="" to="" used="" within="" ≥idl=""></crdl,> |
|-----------------------|--|-----------------------|---|
| J                     | Estimated value  | U                     | Compound was not detected   |
| N                     | Presumptive evidence of a compound (TICs only)   | W                     | Post digestion spike out of control limits  |
| Р                     | Concentration difference between primary and   | *                     | Duplicate analysis not within control limits  |
|                       | confirmation columns >25%  | +                     | Correlation coefficient for MSA < 0.995   |
| U                     | Compound was not detected  |                       |   |
| X,Y,Z                 | Defined in case narrative  |                       |   |

Analytical test results for methods listed on the laboratories' accreditation scope meet all requirements of NELAC unless otherwise noted under the individual analysis.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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